

Water Enforcement (GEN-W)

# Documents for FOIA

#EPA-R6-2013-008311



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6  
1445 ROSS AVENUE, SUITE 1200  
DALLAS, TEXAS 75202-2733

MAY 31 2006

REPLY TO: 6EN-WR

CERTIFIED MAIL - RETURN RECEIPT REQUESTED (7004 1160 0003 0353 8821)

Mr. Doug Agee  
XTO Energy, Inc.  
810 Houston Street  
Fort Worth, TX 76102

Re: Administrative Order Docket No. CWA-06-2006-2009  
Facility No. TXU010805

Dear Mr. Agee:

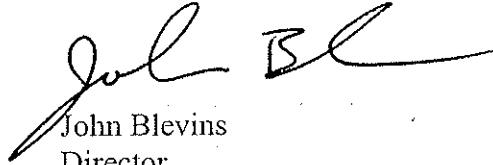
Enclosed is an Administrative Order (AO) issued to XTO Energy, Inc. for a violation of the Clean Water Act (33 U.S.C. § 1251 et seq.). The violation was identified based on our inspection of your facility on March 14, 2006. The violation was discussed with you after our inspection. The violation found consists of an unauthorized discharge of a pollutant, specifically drilling mud, to waters of the United States.

The first compliance deadline is within 30 days of receipt of this AO. The Environmental Protection Agency is committed to ensuring compliance with the requirements of the National Pollutant Discharge Elimination System, and my staff will assist you in any way possible. Please reference AO Docket No. CWA-06-2006-2009 and Facility No. TXU010805 with your response.

Also enclosed is information related to the Small Business Regulatory Enforcement Fairness Act and a "Notice of Registrant's Duty to Disclose" relating to the disclosure of environmental legal proceedings to the Securities and Exchange Commission, that you may find useful.

If you have any questions, please contact Mr. Matt Rudolph, of my staff, at (214) 665-6434.

Sincerely yours,

A handwritten signature in black ink, appearing to read "John Blevins". The signature is fluid and cursive, with the first name "John" and last name "Blevins" clearly distinguishable.

John Blevins  
Director  
Compliance Assurance and  
Enforcement Division

Enclosures

cc: Mr. Mike O'Quinn, Director, Districts 5 & 6  
Railroad Commission of Texas  
619 Henderson Blvd.  
Kilgore, TX 75662-5998

Mr. Jose Mayorga, Field Operations  
Railroad Commission of Texas, Oil and Gas Division  
P.O. Box 12967  
Austin, TX 78711-2967

UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION 6

In the Matter of	§ Docket No. CWA-06-2006-2009
	§
XTO Energy, Inc.,	§
a Texas Corporation,	§
	§ <b>FINDINGS OF VIOLATION</b>
Respondent	§ <b>AND</b>
	§ <b>ORDER FOR COMPLIANCE</b>
Facility No. TXU010805	§

Statutory Authority

The following FINDINGS are made, and ORDER issued, under the authority vested in the Administrator of the United States Environmental Protection Agency (EPA), by Sections 308(a) and 309(a) of the Clean Water Act (herein "the Act"), 33 U.S.C. §§ 1318(a) and 1319(a). The Administrator of EPA has delegated the authority to issue this Order to the Regional Administrator of EPA Region 6, who has further delegated this authority to the Director of the Compliance Assurance and Enforcement Division.

Findings

1. XTO Energy, Inc. (herein "Respondent") is a corporation which was incorporated under the laws of the State of Texas, and as such, Respondent is a "person," as that term is defined at Section 502(5) of the Act, 33 U.S.C. § 362(5), and 40 C.F.R. § 122.
2. At all times relevant to this Order, Respondent owned or operated a drilling mud land farming operation, located at FM 200 and CR 1118 in Johnson County, Texas (herein "the facility"), and was therefore an "owner or operator" within the meaning of 40 C.F.R. § 122.2.





3. At all relevant times, the facility was a "point source" of a "discharge" of "pollutants," specifically drilling mud, to the receiving waters of a tributary of the Brazos River, which is "waters of the United States" within the meaning of Section 502 of the Act, 33 U.S.C. § 1362, and 40 C.F.R. § 122.2.

4. Because Respondent owned or operated a facility that is a point source of discharges of pollutants to waters of the U.S., Respondent and the facility were subject to the Act and the National Pollutant Discharge Elimination System (NPDES) program.

5. Under Section 301 of the Act, 33 U.S.C. § 1311, it is unlawful for any person to discharge any pollutant from a point source to waters of the United States, except with the authorization of, and in compliance with, an NPDES permit issued pursuant to Section 402 of the Act, 33 U.S.C. § 1342. According to the NPDES program, the discharge of drilling mud is a non-permitted discharge.

6. On March 14, 2006, the facility was inspected by an EPA field inspector.

7. The inspector observed that drilling mud had been discharged from the facility located at Latitude 32° 12.73' North and Longitude 97° 36.52' West, to a tributary of the Brazos River, located approximately twenty feet east of the facility at Latitude 32° 12.73' North and Longitude 97° 36.52' West. At Latitude 32° 12.72' North and Longitude 97° 36.65' West, dried drilling mud was observed in the tributary.

8. Each day of unauthorized discharge, was a violation of Section 301 of the Act, 33 U.S.C. § 1311.

ORDER

Based on the foregoing Findings and pursuant to the authority of Sections 308 and 309 of the Act, EPA hereby orders Respondent to take the following action:

A. Upon receipt of this Order, Respondent shall immediately cease all discharges of pollutants from the facility.

B. Within thirty (30) days of the effective date of this Order, Respondent shall take whatever corrective action is necessary to eliminate and prevent recurrence of the violations cited herein.

C. Within thirty (30) days of the effective date of this Order, the Respondent shall submit a written report detailing the specific actions taken to eliminate and prevent the recurrence of the violations cited herein and explaining why such actions are anticipated to be sufficient to prevent recurrence of these or similar violations.

D. Within thirty (30) days of the effective date of this Order, Respondent shall submit the following information to EPA:

- 1) the date of the discharge;
- 2) the quantity of the discharge, if known, or the best estimate;
- 3) the total length of the tributary impacted by the discharge (please include detailed maps of the impacted tributary);
- 4) how the discharge occurred;
- 5) the specific pollutants present in the discharge (please provide any analytical data of drilling mud samples taken both before and after the discharge);
- 6) the clean-up plan to remediate the damage done to the impacted tributary; and

7) photos before, during, and after clean-up efforts.

E. Any information or correspondence submitted by the Respondent to EPA under this Order shall be addressed to the following:

Mr. Matt Rudolph  
Water Enforcement Branch (6EN-WR)  
U.S. EPA, Region 6  
1445 Ross Avenue  
Dallas, TX 75202-2733

General Provisions

Issuance of this Order shall not be deemed an election by EPA to forego any administrative or judicial, civil or criminal action to seek penalties, fines, or any other relief appropriate under the Act for the violations cited herein, or other violations that become known. EPA reserves the right to seek any remedy available under the law that it deems appropriate.

Failure to comply with this Order or the Act can result in further administrative action, or a civil judicial action initiated by the U.S. Department of Justice. If the United States initiates a civil judicial action, Respondent will be subject to civil penalties of up to \$32,500 per day per violation.<sup>1</sup>

If a criminal action is initiated by U.S. Department of Justice, and Respondent is convicted of a criminal offense under Section 309(c) of the Act, the Respondent may become ineligible for certain contracts, grants, or loans under Section 508 of the Act.

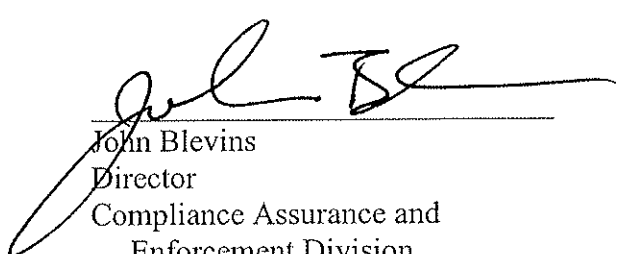
This Order does not constitute a waiver or modification of the terms or conditions of the Permittee's NPDES permit, which remains in full force and effect. Compliance with the terms and conditions of this Order does not relieve the Permittee of its obligations to comply with any applicable federal, state, or local law or regulation.

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The civil penalty amounts that can be assessed under Section 309 of the Clean Water Act were amended by the Civil Monetary Penalty Inflation Adjustment Rule (61 Fed. Reg. 69359, December 31, 1996, as corrected in 62 Fed. Reg. 13514, March 20, 1997 and effective June 1, 1997; and amended in 69 Fed. Reg. 7121, February 13, 2004 and effective March 16, 2004; under the Debt Collections Improvement Act of 1996, 31 U.S.C. § 3701, et. seq.

The effective date of this Order is the date it is received by the Permittee.

5/31/06  
Date

  
\_\_\_\_\_  
John Blevins  
Director  
Compliance Assurance and  
Enforcement Division



## EPA REGION 6 ENFORCEMENT DIVISION INSPECTION REPORT

FRS #:			
Media #:			
Permit #			
Inspection Type:			
Inspection Date:	11/21/2011		
Company Name:	XTO Energy		
Facility Name:			
Physical Location:			
Mailing Address:	810 Houston St. Fort Worth, TX 76102		
County/Parish:			
SIC Code:			
NAICS Code:			
Reg Programs			
Facility Representatives:			
EPA Inspectors:	Selgrath/Rudolph		
State Inspectors:			
EPA Lead Inspector Signature/Date	Selgrath/Rudolph,		Date
Peer Reviewer Signature/Date:	Peer Reviewer Name, Title		Date
Supervisor Signature/Date:	Willie Lane, Jr, Chief, Water Resources Section (6EN-WR)		Date

## **Section I - INTRODUCTION**

### **PURPOSE OF THE INSPECTION**

### **FACILITY DESCRIPTION**

## **SECTION II - OBSERVATIONS**

Conducted an NPDES CWA inspection of the XTO facility TRWD East unit with 4 gas wells. Did not find a violation of the CWA. Took photos and observations. Only fluids showed 400 - 500 ppm TSS inside facility. Some evidence of historical vegetation kill. Eagle Mt. Lake showed 200ppm TSS at site.

POINT SOURCE: Facility

LAT/LONG: N 32, 57.019' and W 97, 30.005'

IMPACTED WATER BODY: Eagle Mt Lake

LAT/LONG: N 32, 57.103' and W 97, 29.998'

## **Section III - AREAS OF CONCERN**

**AUTHORIZED  
PERSONNEL  
ONLY**

**XTO**  
TARRANT COUNTY, TEXAS  
1-800-333-3333  
TRWD EAST UNIT E2 3H  
53.18 ACRES RRC #219223  
NEWARK EAST BARRETT SWALD FELD  
TARRANT COUNTY, TEXAS

**XTO**  
TARRANT COUNTY, TEXAS  
1-800-333-3333  
TRWD EAST UNIT E2 4H  
95.45 ACRES RRC #217525  
NEWARK EAST BARRETT SWALD FELD  
TARRANT COUNTY, TEXAS

**XTO**  
TARRANT COUNTY, TEXAS  
1-800-333-3333  
TRWD E 2 1H  
2449.78 ACRES RRC #217296  
NEWARK EAST BARRETT SWALD FELD  
TARRANT COUNTY, TEXAS

**XTO**  
TARRANT COUNTY, TEXAS  
1-800-333-3333  
TRWD E NORTH UNIT E 2 2H  
95.63 ACRES RRC #217533  
NEWARK EAST BARRETT SWALD FELD  
TARRANT COUNTY, TEXAS



YSI 30 Salinity Conductivity Temperature

0.4

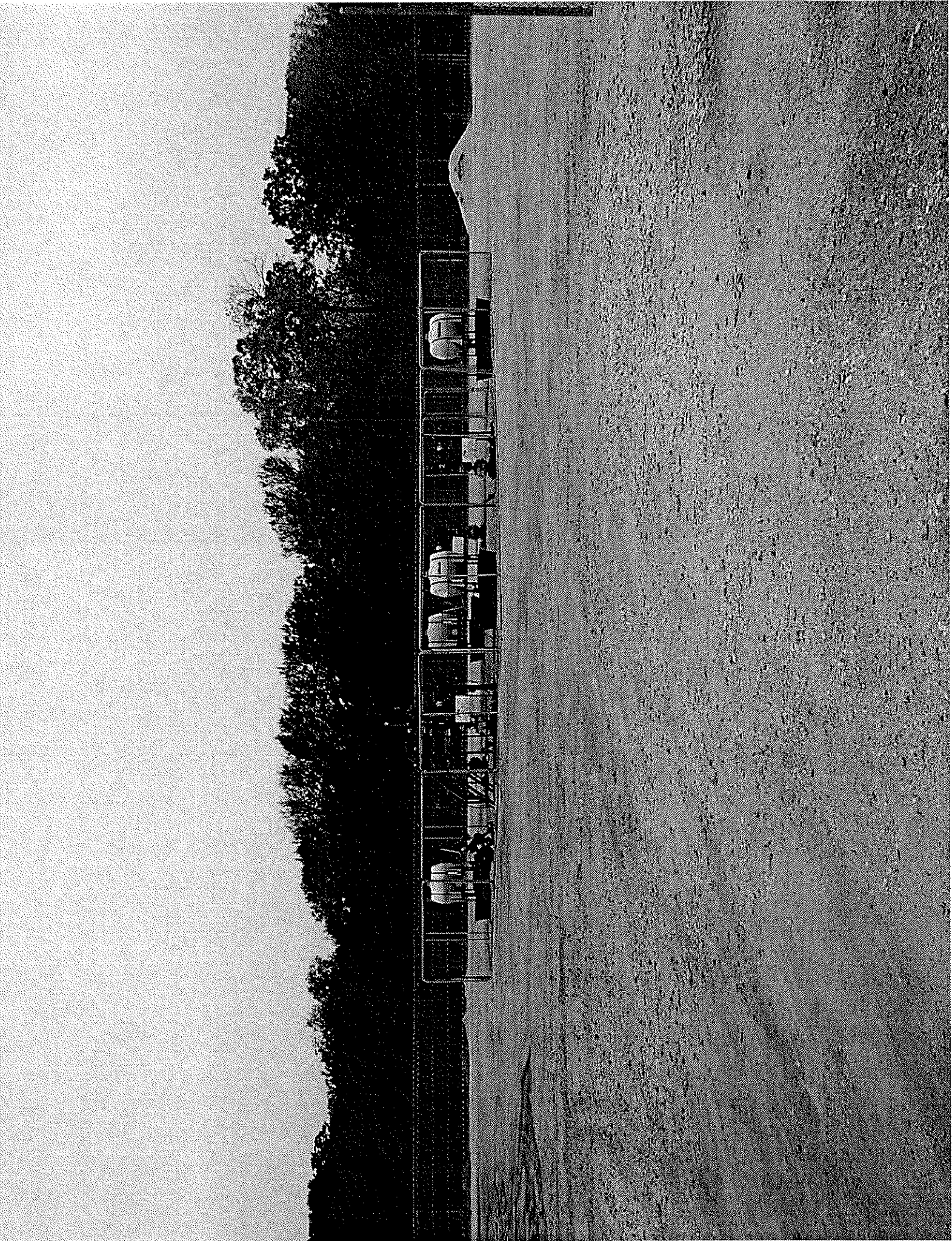
Sp. Sal. Cond. - 1/15/04

ON/OFF

LIGHT



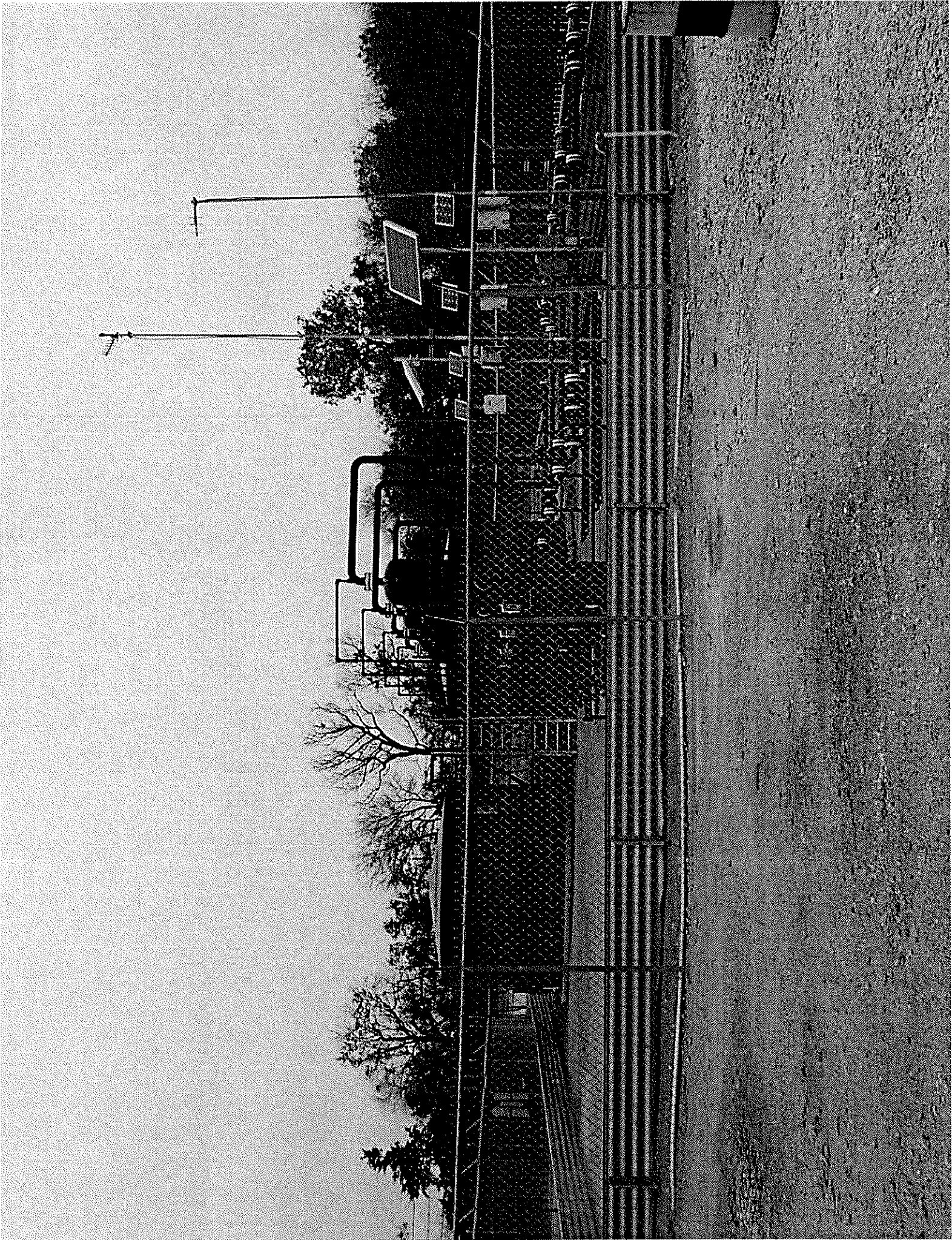




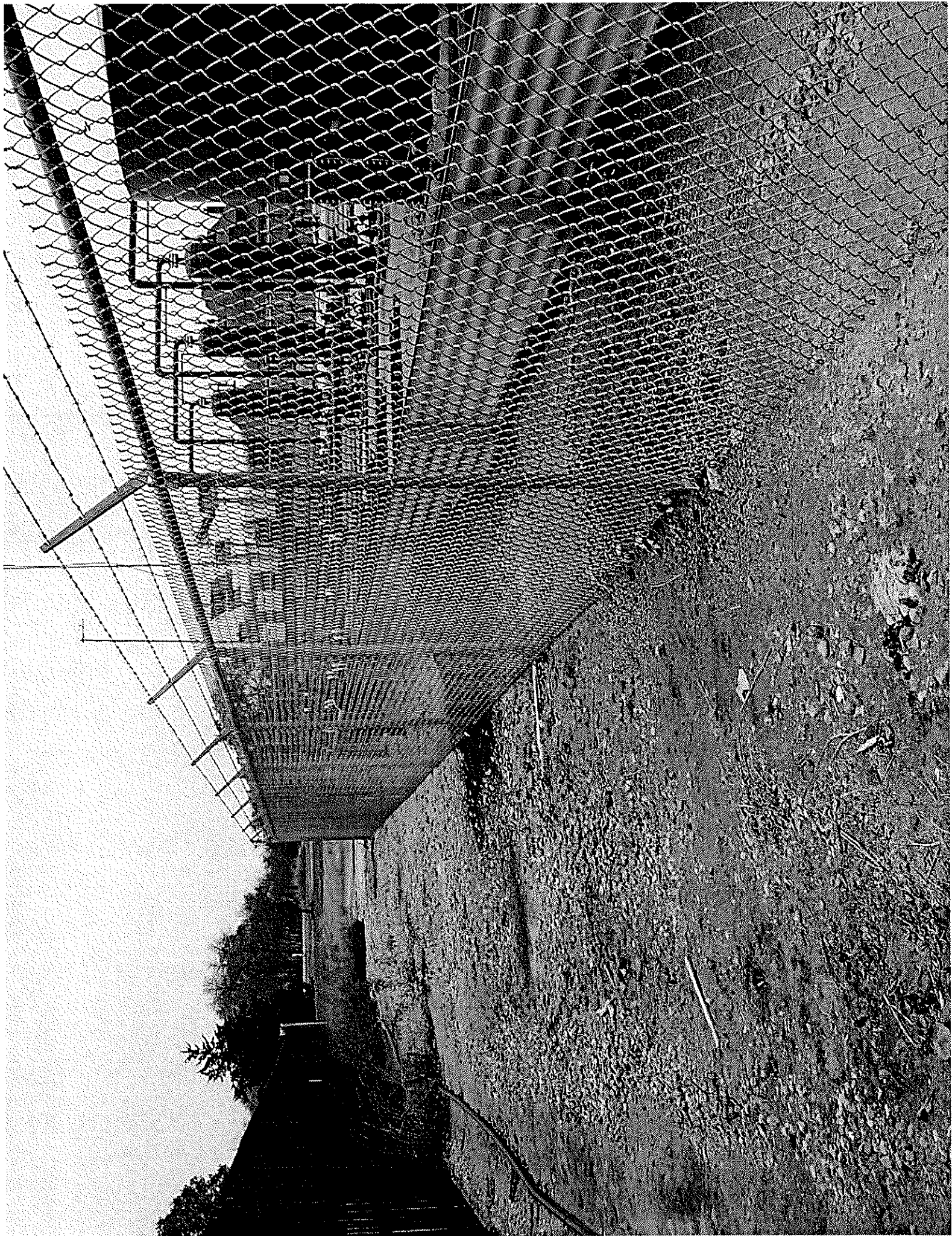














TRW0 EAST UNIT #2 4H

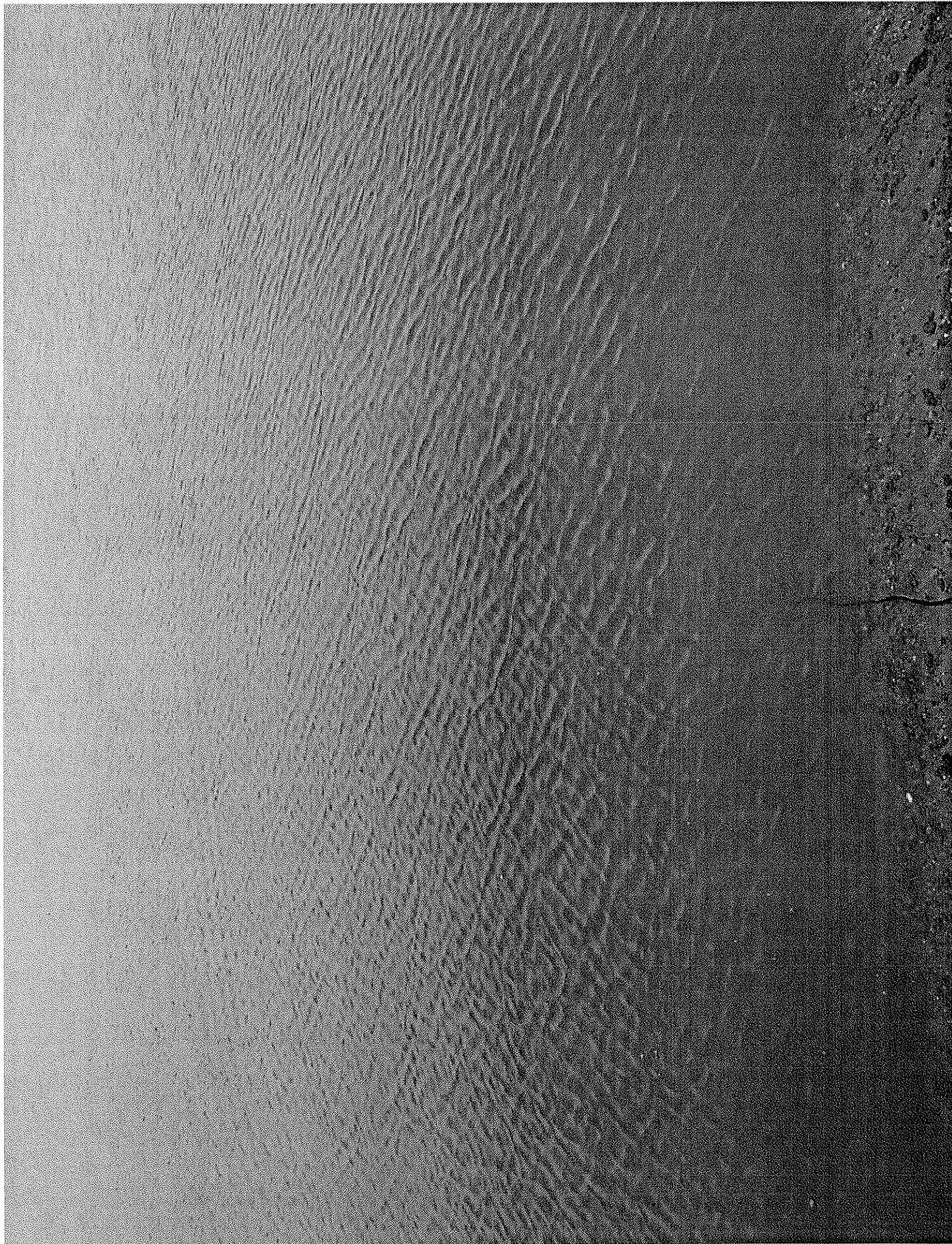
9545 ACRES RRC #  
NEWARK EAST (BARNETT SHALE) FIELD  
TARRANT COUNTY, TEXAS  
1-866-533-6836































## INSPECTION REPORT

REPORT DATE: 4/12/2006

INCIDENT NO: 03142006-1

INSPECTION DATE: 3/14/2006

INVESTIGATOR: Matt Rudolph

LOCATION\COUNTY: Johnson Co., TX

SPILL OR DISCHARGE DATE:

MATERIAL SPILLED: Drilling Mud

AMOUNT: approx 500 bbls

REPORTED BY:

OWNER/OPERATOR: XTO Energy, Inc.  
810 Houston Street  
Fort Worth TX 76102  
817-870-2800

SURFACE OWNER:

PHONE:

EMERGENCY HOTLINE NOTIFIED: no

POINT SOURCE: Drilling mud land farming operation

LATITUDE/LONGITUDE: N32 12.732' W97 36.518'

RECEIVING WATER: Tributary of the Brazos River

LATITUDE/LONGITUDE: N32 12.730' W97 36.521'

### INSPECTION OBSERVATIONS:

Observed drilling mud had been discharges from the land farming operation into the tributary of the Brazos River. Clean-up was underway during the time of the inspection. Operator unable to perform clean-up in parts of the tributary due to the request of the land owner. Gray staining from the drilling mud was present in the tributary.

SUPPORTING VIDEO, PICTURES, OR Photos

OTHER AGENCIES OR PARTIES CONTACTED OR

TRRC

REGIONAL COMMENTS/INFORMATION OBTAINED:

Rudolph contacted XTO Energy.

**XTO ENERGY  
JOHNSON CO., TEXAS  
MARCH 14, 2006**

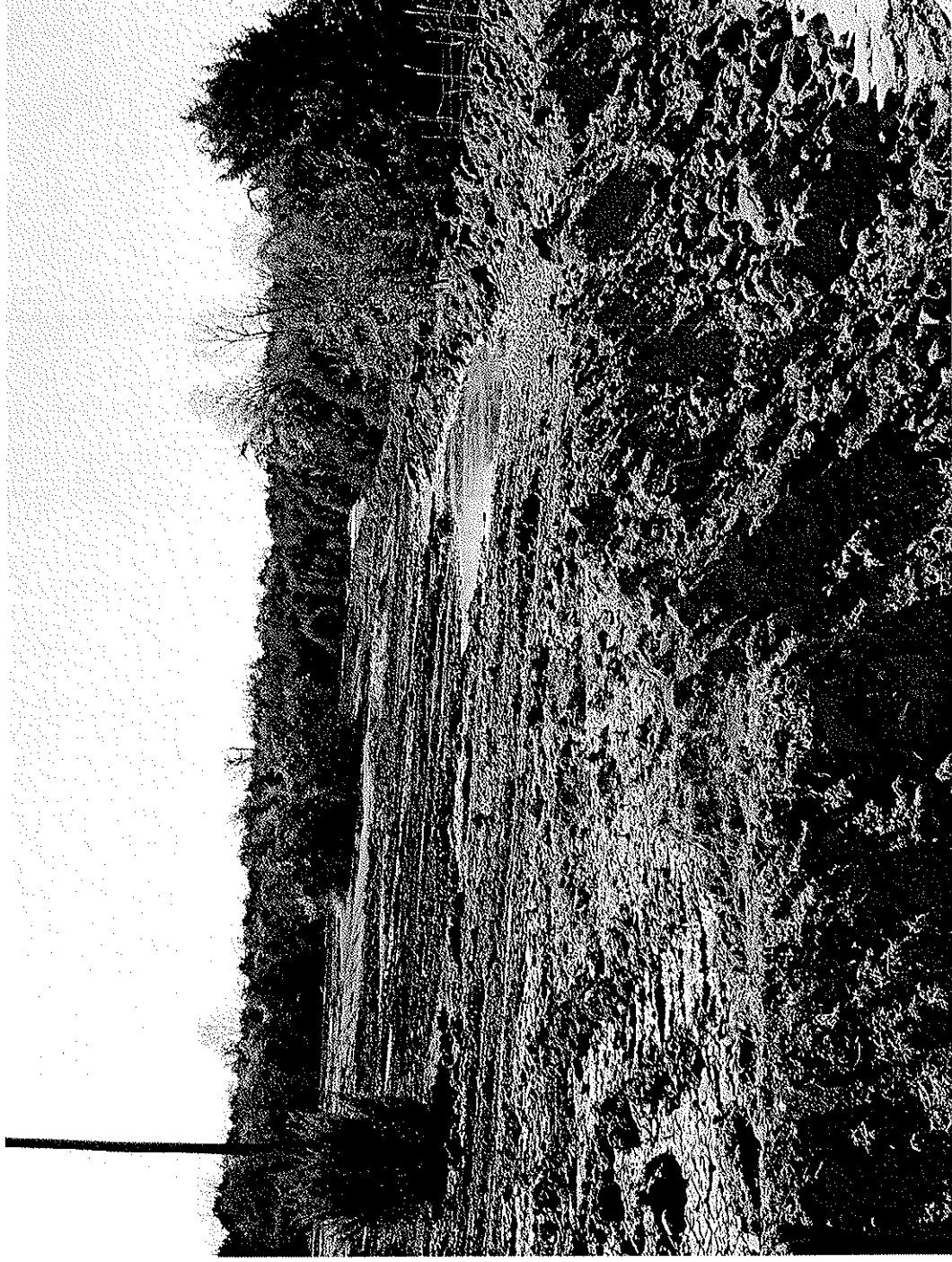


Photo 1. Taken south. Area where drilling mud is being land farmed.



**XTO ENERGY  
JOHNSON CO., TEXAS  
MARCH 14, 2006**



Photo 2. Taken northwest. Area where drilling mud is being land farmed.

**XTO ENERGY**  
**JOHNSON CO., TEXAS**  
**MARCH 14, 2006**



Photo 3. Taken north. Location where the drilling mud flowed over the berm wall.  
Located at N32 12.732' W97 36.518'.

**XTO ENERGY**  
**JOHNSON CO., TEXAS**  
**MARCH 14, 2006**



Photo 4. Taken north. Point of entry into the tributary. N32 12.730' W97 36.521'.

**XTO ENERGY**  
**JOHNSON CO., TEXAS**  
**MARCH 14, 2006**



Photo 5. Taken west. Stream segment which was impacted from the spill.



**XTO ENERGY**  
**JOHNSON CO., TEXAS**  
**MARCH 14, 2006**



Photo 6. Taken west. Facing the Nixon's property which was impacted from the spill.  
Standing at N32 12.724' W97 36.652'.

**XTO ENERGY**  
**JOHNSON CO., TEXAS**  
**MARCH 14, 2006**



Photo 7. Taken west. Facing the Nixon's property which was impacted. Standing at N32 12.724' W97 36.652'.

**XTO ENERGY**  
**JOHNSON CO., TEXAS**  
**MARCH 14, 2006**



Photo 8. Taken west. Standing at N32 12.710' W97 36.717'. Still drilling mud in the creek.

**XTO ENERGY**  
**JOHNSON CO., TEXAS**  
**MARCH 14, 2006**



Photo 9. Taken south. Nixon's property. Dried drilling mud still present inside the creek.



**XTO ENERGY**  
**JOHNSON CO., TEXAS**  
**MARCH 14, 2006**



Photo 10. Taken southwest. The last area affected by the spill. Dammed up to prevent it from going further downstream. Located at N32 12.664' W97 36.817'.

**XTO ENERGY**  
**JOHNSON CO., TEXAS**  
**MARCH 14, 2006**



Photo 11. Taken northeast. The last area affected by the spill. Facing opposite direction of Photo 10.

## Drilling mud discharges:

- How many different discharges
- Johnson County discharge

Who - XTO Energy

What - Analytical - Send a letter

When - Time and Date - Clean up procedures

Where - Location of <sup>the</sup> spills or discharges

Why - The discharges occurred - Send a list of all discharges - which

How - ~~The discharges~~ made it to a creekHow - Volume of - Time ~~of~~ and Date of discharges

Discharge - Analytical data of the discharges

How much of the stream segment <sup>was</sup> impacted by drilling muds

- Pictures of discharge (clean-up etc.)

- Clean up - procedures

XTO ENERGY INC.

810 Houston Street

Fort Worth TX 76102

met  
Spoken with James Yeager, Safety Director  
with Mr. Kevin Howerton on 3/14/06

Any type of enforcement action taken by the  
who would I address or contact

Call to: James Yeager  
Phone: 817-885-3008

- Environmental Safety Coordinator

XTO Energy Attn James Yeager  
Barnett Shell Division  
210 West Six Street  
Fort Worth TX 76102

(817) 870-2800

Doug Agee  
810 Houston St  
Fort Worth TX 76102

Texas Corporation

XTO Energy

- David Danner  
- Mansfield

- 480-242-8405

- Natural Retention Pond  
- Rain

Bermed Up Spraying  
- Mansfield

FM 1187, -right, 5-6  
287 - 35 W South

Drainage Ditch -  
North Teague Rd 2-3 miles North Left hand side  
Tuscanny Valley ~~Road~~ Estates

~~at~~ Debby Lane - come to a stoplight

Town of Ponder



## Environmental, Health &amp; Safety Department

FAX TRANSMISSION

817-885-2285

To: Matt Rudolph From: Doug Byee  
Fax: 214-665-2168 Phone: \_\_\_\_\_  
Date: 6-21-06 Pages: 3 (including cover)  
Re: Spill

☐ Urgent ☐ Please Reply ☐ For Review ☐ For Your Files

## Comments:

Rocket CWA - 06-2006-2009

**CONFIDENTIALITY NOTE:** The documents accompanying this facsimile transmission contain information belonging to XTO Energy Inc. that is confidential and/or legally privileged. The information is intended only for the use of the individual or entity named above. If you are not the intended recipient, you are hereby notified that any examination, disclosure, copying, distribution or the taking of any action in reliance on, or with respect to, the contents of this faxed information is strictly prohibited. If you have received this facsimile in error, please immediately notify the person identified as the sending person by collect person-to-person telephone call at the number set forth above to arrange for return of the original documents to us at our expense.



Mr. Matt Rudolph  
Water Enforcement Branch (6EN-WR)  
U.S. EPA Region 6  
1445 Ross Ave.  
Dallas, Texas 75202-2733

Re: Administrative Order Docket No. CWA-06-2006-2009  
Facility No. TXU010805

Dear Mr. Rudolph,

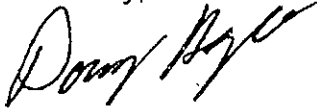
In reply to your letter of May 31, 2006, XTO Energy is providing the requested information on our drilling mud land farm at FM 200 and CR 1118 in Johnson County, Texas.

The facility is not a point discharge. The flow was over land and was into a dry creek bed. No drilling mud entered any water of the U.S. We were permitted by the Railroad Commission to land farm the drilling mud. Due to an error by contract truck drivers, who discharged numerous truck loads of drilling mud at the same location the containment was overflowed resulting in some drilling mud flowing into dry creek bed. The unloading was done at night and was not discovered until the following day.

1. The discharge occurred on the night of March 4, 2006.
2. The amount of discharge is estimated to have been 21,000 gallons.
3. The total length of dry tributary impacted was 3000 feet.
4. Trucks were dumping drilling mud at land farm at night. All of the trucks dumped at the same area, due to soft ground. The volume in small area overflowed the containment.
5. A report of the discharge is attached.
6. The site has been cleaned up by removing surface and using vacuum trucks to remove liquids and solids from dry stream bed.
7. Photos of before and after are attached.

We did have a permit from the railroad commission to do the land farm. We have cleaned up the area of spill. We did this in a timely fashion with in put from the land owners. We did not allow any drilling mud or fluids to get into any waters of the U.S. XTO regrets that this happened and has put procedures in place to insure that this will not happen in the future, i.e. no night dumping of drilling mud.

Sincerely,

A handwritten signature in black ink, appearing to read "Doug Agee", written in a cursive style.

Doug Agee, PE  
Environmental Engineer  
817-885-2285





Mr. Matt Rudolph  
Water Enforcement Branch (6EN-WR)  
U.S. EPA Region 6  
1445 Ross Ave.  
Dallas, Texas 75202-2733

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Facility No. TXU010805

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A handwritten signature in black ink, appearing to read "Doug Agee", written in a cursive style.

Doug Agee, PE  
Environmental Engineer  
817-885-2285

CERTIFIED MAIL 7003 1680 0000 1968 4683

After Clean-up



After Clean-up





After Clean-up



Before Clean-up



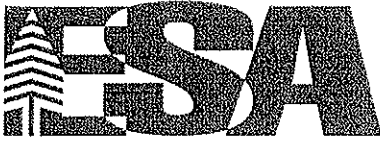
Before Clean-up





Before Clean-up





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## ESA Consulting, L.L.C.

April 24, 2006

Mr. James Yeager  
XTO Energy  
210 W. 6<sup>th</sup> Street; Suite 1005  
Fort Worth, Texas 76102

RE: XTO Energy Pacific 1H Land Farming  
Johnson County, Texas  
ESA Project No.: CXTO0606

Dear Mr. Yeager:

ESA Consulting, L.L.C. (ESA) has prepared this letter to document sampling associated with a drilling mud spill on the XTO Pacific 1H land farm, in Johnson County, TX.

On March 8, 2006, ESA sampled a drilling mud spill that occurred on March 03, 2006. Kevin Howerton of XTO Energy requested ESA to provide pre-cleanup analytical results for five soil samples and two surface water samples. On March 27, 2006, ESA was contacted by Kevin Howerton to sample post cleanup on March 28, 2006. Mr. Howerton requested 16 soil samples and at least one surface water sample be taken from the remediated area. One soil sample was taken away from affected area to get an approximate background value.

Recommendations for addressing the results of these issues are included in the attached report.

ESA appreciates the opportunity to provide environmental services to XTO Energy. If you have questions or require additional information please call me at (903) 234-0404.

Respectfully,

ESA CONSULTING, LLC

Chris Hightree  
Environmental Scientist

C:\ESAWORK60\CXTO0606\XTO letter.doc

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### LONGVIEW

1201 NW Loop 281, LB-3, Longview, Texas 75604  
(903) 234-0404 phone // (903) 234-0494 fax

[www.webesa.com](http://www.webesa.com)

### TYLER

401 E Front Street, Suite 225, Tyler, Texas 75702  
(903) 526-9990 // (903) 526-9991 fax

(for) R. K. Earley  
Kevin Ritch  
Regulatory Specialist

Kurt Ritch w/ permission  
Kurt Ritch, PG  
Manager Earley

cc:



## **1.0 Objective**

ESA Consulting, L.L.C. (ESA) was retained by XTO Energy, Inc. (XTO) to sample a drilling mud release associated with Oil & Gas exploration land farming activities in Johnson County, Texas. The purpose of the investigation was to document and collect samples of environmental media for analysis.

## **2.0 Location**

The XTO Pacific 1H land farm area is located at the intersection of Highway 200 and Brazos Point Rd. in Johnson County, Texas. (Figure 1 is a topographic map.)

## **3.0 Pre-Cleanup Response Team**

The response team consisted of Mr. Kevin Howerton of XTO who provided background information on the spill, Mr. Chris Hightree, an environmental scientist for ESA, Mr. Kevin Ritch, a Regulatory Specialist for ESA, and Mr. Roger Satterwhite with the Texas Railroad Commission.

### **3.1 Post-Cleanup Response Team**

The response team consisted of Mr. Kevin Ritch, a Regulatory Specialist for ESA.

## **4.0 Background**

According to Mr. Howerton, the initial spill occurred from a breach in an earthen berm placed around a land farming area. The content of the spilled media was drilling mud. The spill had migrated approximately 3000 feet west southwest along a dry ravine and into a dry creek bed. XTO initiated cleanup by power washing and then vacuuming all free product within the affected area.

## **5.0 Investigation**

ESA was present at the location on March 8, 2006 and March 28, 2006 to conduct a pre-and post-cleanup field investigation. The March 8<sup>th</sup> field investigation revealed evidence of the spilled drilling mud as evidenced by drilling mud within a dry ravine and a dry creek bed. Figure 2 depicts the site layout, the spill path, and the sampling points for the initial sampling event. Figure 3 depicts the sampling points of the post-cleanup sampling event.

## **6.0 Sampling**

Soil and surface water samples were collected on March 08, 2006 and March 28, 2006 for analyses of benzene, toluene, ethylbenzene, and total xylenes (BTEX), total petroleum hydrocarbons (TPH), mercury, arsenic, barium, cadmium, chromium, lead, selenium, and silver (RCRA), and total chlorides. The pre-clean up samples were

Table 4

TPH in Surface Water

Pacific 1H Lease  
Land Farm Sampling  
Johnson County, Texas

ESA Project No.CXTO0606

COC	TPH C6 - C12	TPH C12 - C28	TPH C28 - C35	TPH C6 - C35 Total
CAS No.	NA	NA	NA	NA
EPA Method	1005	1005	1005	1005
Units	mg/l	mg/l	mg/l	mg/l
PCL <sup>1</sup>	NA	NA	NA	NA

Date

Pre Clean-up

XTO AD2 Water 3/8/2006  
XTO AD3 Water 3/8/2006

ND	ND	ND	ND
ND	ND	ND	ND

Post Clean-up

Liquid 3/28/2006

ND	ND	ND	ND
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<sup>1</sup> Based on Residential <sup>GW</sup> GW<sub>ing</sub>

Samples reported ND below Reporting Limit (RL)

Table 3

## RCRA Metals in Surface Soil

Pacific 1H Lease  
Land Farm Sampling  
Johnson County, TX  
ESA Project No. CXTO0606

COC			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
CAS No.			7440-38-2	7440-39-3	7440-43-9	7440-47-3	7439-92-1	7487-94-7	7782-49-2	7440-22-4
EPA Method			6020	6020	6020	6020	6020	7470	6020	6020
Units			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCL <sup>1</sup>			5	440	1.5	2400	3	2.1	2.3	1.4
Date										
Pre Clean-up	Depth	Date								
XTO BD	0-6"	3/8/2006	2.8	29	ND	1.8	8.5	ND	1.1	ND
XTO AD1	0-6"	3/8/2006	3.3	1500	ND	13	11	ND	2	ND
XTO AD2 Mud	0-6"	3/8/2006	3.6	1700	ND	37	17	0.03	ND	ND
XTO AD3 Mud	0-6"	3/8/2006	2.7	1800	ND	39	13	0.02	ND	ND
XTO AD 4	0-6"	3/8/2006	2.3	1800	ND	20	10	ND	ND	ND
Post Clean-up										
XTO Bda	0-6"	3/28/2006	7.4	110	ND	2.5	9.6	ND	ND	ND
XTO BDb	0-6"	3/28/2006	4.8	23	ND	2.5	5	ND	ND	ND
XTO BDc	0-6"	3/28/2006	4.1	56	ND	1.7	6.5	ND	ND	ND
XTO AD1a	0-6"	3/28/2006	3	98	ND	1.2	4.4	ND	ND	ND
XTO AD1b	0-6"	3/28/2006	ND	13	ND	2.4	5.4	ND	ND	ND
XTO AD1c	0-6"	3/28/2006	4.4	160	ND	ND	6.3	ND	ND	ND
XTO AD2a	0-6"	3/28/2006	3.8	44	ND	2	4.5	ND	ND	ND
XTO AD2b	0-6"	3/28/2006	3.9	24	ND	2.8	6.4	ND	ND	ND
XTO AD2c	0-6"	3/28/2006	3.4	34	ND	2	5.2	ND	ND	ND
XTO AD3a	0-6"	3/28/2006	4.9	840	ND	4.6	7.9	ND	ND	ND
XTO AD3b	0-6"	3/28/2006	4.1	32	ND	2.6	4.8	ND	ND	ND
XTO AD3c	0-6"	3/28/2006	3.6	64	ND	2	6.3	0.02	ND	ND
XTO AD4a	0-6"	3/28/2006	6.2	530	ND	6.1	8.5	ND	ND	ND
XTO AD4b	0-6"	3/28/2006	4.3	25	ND	3.1	6.6	ND	ND	ND
XTO AD4c	0-6"	3/28/2006	4	890	ND	9.1	7.4	ND	ND	ND
Background	0-6"	3/28/2006	1.8	19	ND	1.1	3.9	ND	ND	ND

<sup>1</sup> Based on Residential <sup>GW</sup> Soil <sub>mg</sub>

Samples reported ND below Reporting Limit (RL)

Indicates values above PCL's limits

Table 5

## BTEX in Surface Water

Pacific 1H Lease  
Land Farm Sampling  
Johnson County, Texas

ESA Project No. CXTO0606

		COC	Total Benzene	Total Toluene	Total Ethylbenzene	Total Xylene
		CAS No.	71-43-2	108-88-3	100-41-4	1330-20-7
		EPA Method	8260B	8260B	8260B	8260B
		Units	mg/l	mg/l	mg/l	mg/l
		Critical PCL	0.005	1	0.7	10
<b>Pre Clean-up</b>						
Sample	Date					
XTO AD2 Water	3/8/2006		ND	ND	ND	0.021
XTO AD3 Water	3/8/2006		ND	ND	ND	ND
<b>Post Clean-up</b>						
Liquid	3/28/2006		ND	ND	ND	ND

<sup>1</sup> Based on Residential <sup>GW</sup> GW<sub>ing</sub>

Samples reported ND below Reporting Limit (RL)



Table 6

## RCRA Metals in Surface Water

Pacific 1H Lease  
Land Farm Sampling  
Johnson County, Texas  
ESA Project No. CXTO0606

	COC	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
CAS No.	7440-38-2	7440-39-3	7440-43-9	7440-47-3	7439-92-1	7487-94-7	7782-49-2	7440-22-4	
EPA Method	6020	6020	6020	6020	6020	7470	6020	6020	6020
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
PCL <sup>1</sup>	0.01	2	0.005	0.1	0.015	0.002	0.05	0.12	
Date									
<b>Pre Clean-up</b>									
Sample	Date								
XTO AD2 Water	3/8/2006	0.07	5.6	ND	0.81	0.15	ND	ND	ND
XTO AD3 Water	3/8/2006	0.07	4.4	ND	0.68	0.11	ND	0.11	ND
<b>Post Clean-up</b>									
Liquid	3/28/2006	ND	0.1	ND	ND	ND	ND	ND	ND

<sup>1</sup> Based on Residential <sup>GW</sup> **GW** <sub>ing</sub>

Samples reported ND below Reporting Limit (RL)  
Indicates values above PCL's limits

Table 7

## Chlorides in Soil and Water

Pacific 1H Lease  
Land Farm Sampling  
Johnson County, Texas  
ESA Project No. CXTO0606

**SOIL**

		COC	Chlorides
		CAS No.	NA
		EPA Method	300
		Units	mg/kg
		Critical PCL	NA
Pre Clean-up	Depth	Date	
XTO BD	0-6"	3/8/2006	129
XTO AD1	0-6"	3/8/2006	910
XTO AD2 Mud	0-6"	3/8/2006	1210
XTO AD3 Mud	0-6"	3/8/2006	5170
XTO AD 4	0-6"	3/8/2006	4000
<b>Post Clean-up</b>			
XTO Bda	0-6"	3/28/2006	ND
XTO BDb	0-6"	3/28/2006	ND
XTO BDc	0-6"	3/28/2006	ND
XTO AD1a	0-6"	3/28/2006	7.2
XTO AD1b	0-6"	3/28/2006	8.5
XTO AD1c	0-6"	3/28/2006	ND
XTO AD2a	0-6"	3/28/2006	15
XTO AD2b	0-6"	3/28/2006	ND
XTO AD2c	0-6"	3/28/2006	6.5
XTO AD3a	0-6"	3/28/2006	11
XTO AD3b	0-6"	3/28/2006	5.5
XTO AD3c	0-6"	3/28/2006	ND
XTO AD4a	0-6"	3/28/2006	17
XTO AD4b	0-6"	3/28/2006	ND
XTO AD4c	0-6"	3/28/2006	180
Background	0-6"	3/28/2006	ND

Indicates levels above RRC limit of 3000 mg/kg Chloride

**WATER**

		COC	Chlorides
		CAS No.	NA
		EPA Method	300
		Units	mg/L
		Critical PCL	NA
Pre Clean-up	Date		
XTO AD2 Water	3/8/2006		3170
XTO AD3 Water	3/8/2006		3640
<b>Post Clean-up</b>			
Liquid	3/28/2006		82

Indicates levels above RRC limit of 500 mg/L Chloride



**ANACHEM INC.**

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## Analytical Report

Monday, March 13, 2006

Kurt Ritch  
ESA Cons., LLC- Longview  
1201 NW Loop 281, Ste. 300, LB-3  
Longview, TX 75604

Tel: 903-234-0404  
Fax: 903-234-0494

Re: CXTO0606  
Dear Kurt Ritch:

Order No.: 0603071

Anachem, Inc. received 7 sample(s) on 3/8/2006 for the analyses presented in the following report.

Howard Hayden  
Lab Director

Anachem Inc. certifies that all report results, unless otherwise noted, were produced in accordance with the requirements of the National Environmental Laboratory Accreditation Program (NELAP). The results presented apply to the samples analyzed in accordance to the Chain-of-Custody documentation accompanying the samples. This report is intended for the sole use of the customer for whom the work was provided.